
JOHNSON COUNTY

(Johnson County Water Service Area Map)

- Estimated 1999 population of 24,200--59% on public water
- Estimated 2020 population of 24,500--88% on public water
- 220 miles of water lines, with plans for additional 225 miles
- Estimated funding needs for public water 2000-2005--\$9,620,000
- Estimated funding needs for public water 2006-2020--\$9,100,000

Johnson County had an estimated population of 24,193 (9,543 households) in 1999. Some 5,501 households (approximately 59%) were served by public water. The remainder relied primarily on wells. It is projected that the population of Johnson County will be 24,500 (10,672 households) in the year 2020. Proposed water line extensions in the period 2000-2020 will serve another 3,120 households, so that public water will be provided to about 88% of the county's population.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers	Cost	Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
JOHNSON								-
Paintsville	41	1200	2,000	1,625	2,000	4,000		9,625
Total	41	1200	2,000	1,625	2,000	4,000		9,625

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers	Cost	Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
JOHNSON								-
Paintsville	182	1920	9,100					9,100
Total	182	1920	9,100					9,100

PUBLIC WATER SYSTEMS

One public and one private water system serve Johnson County. Traditionally relying on the Levisa Fork for source, the City of Paintsville has constructed, operated, and maintained a municipal water system since the early part of this century, undergoing several major renovations and consistently maintaining a high quality service. The Paintsville system acquired the Johnson County Water District in the early 1980's and since that time has

WATER SERVICE AREAS

JOHNSON COUNTY

Kentucky

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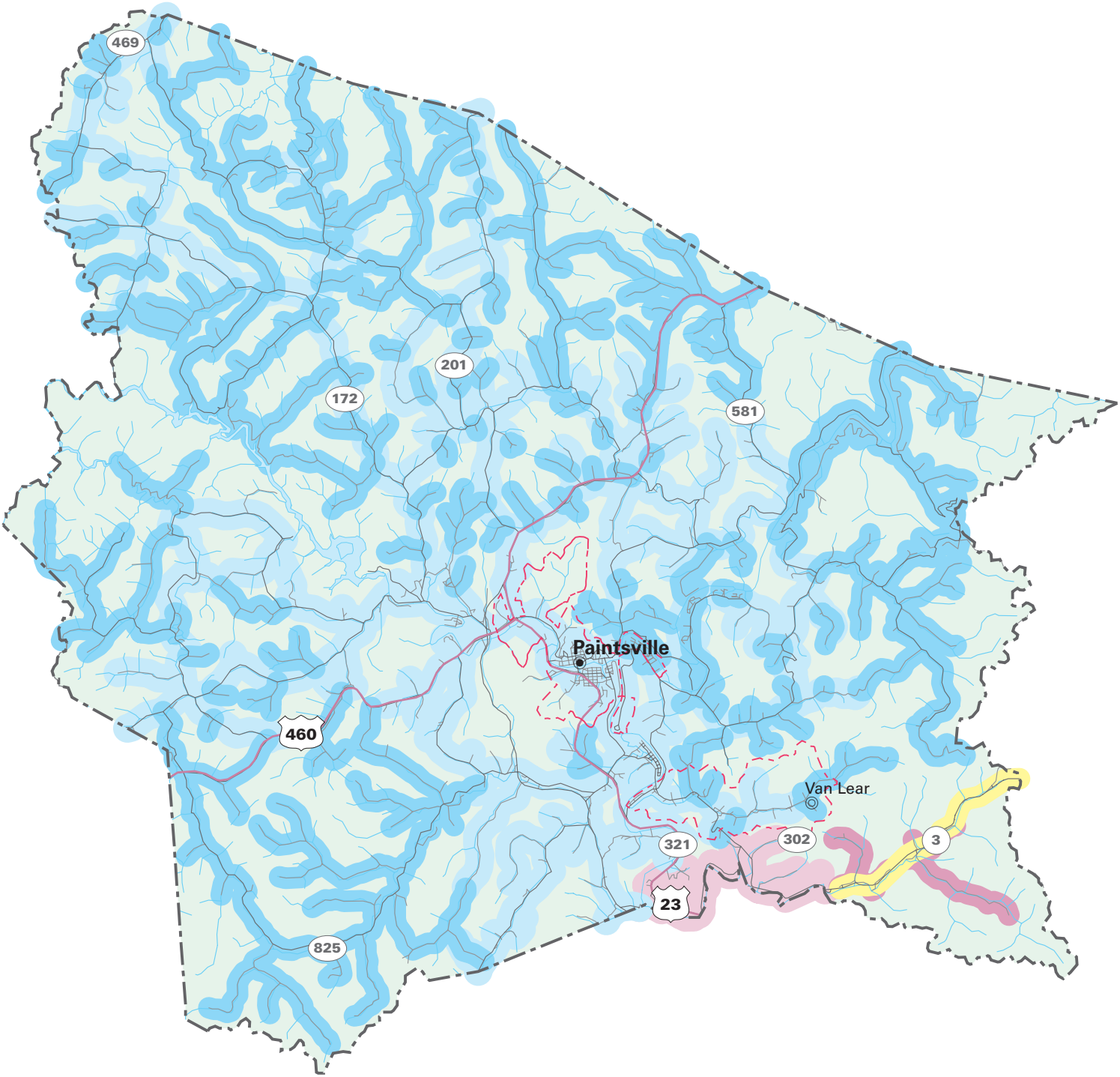
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WATER SERVICE STATUS BY OWNER		
EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		PRESTONSBURG CITY UTILITIES COMMISSION
		PAINTSVILLE UTILITY COMMISSION
		AUXIER WATER COMPANY, INC

served as the sole public water utility in the County. Increasing demands for service in Johnson County and in neighboring counties prompts the system to expand and improve its region-serving infrastructure and broaden its management capacities. The City participates in an interlocal cooperation agreement with the Martin County Water District and the City of Prestonsburg, Johnson, Floyd, Pike, and Martin Counties, the Honey Branch Industrial Development Authority, and the Big Sandy Area Development District in a collaborative approach to providing water and wastewater infrastructure to the Honey Branch Industrial Park in Martin County.

The Auxier Water Company is a private water distribution system serving the easternmost portions of Johnson County, in the Johns Creek, KY Route 320, and KY Route 3 areas of the county. By agreement with its water supplier (Prestonsburg), the company will soon extend water service to several hundred households in Johnson County as a consequence of the infrastructure development to accommodate the new industrial park in Martin County.

PAINTSVILLE MUNICIPAL WATER WORKS

PWSID:	0580340
System Type:.....	COMMUNITY
Owner Type:	MUNICIPAL
Surface Source:	LEFT FORK BIG SANDY
Purchase Source:	
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):.....	3.00
Percent Daily Average Production:.....	60.00
Total Tank Storage Capacity (gallons):	2,833,000.00
Total Service Connections:	5,900.00
Number of Employees:.....	27.00
Treatment Operator Class:	3D
Distribution Operator Class:.....	4A
Customer Rate for 1,000 Gallons:.....	4.07
O/M costs 1997:	Not available
O/M costs per Service Connection:	Not available
Net Revenue 1997:	Not available
Total Water Produced 1997 (gallons):.....	Not available
Water Sold 1997 (gallons):	Not available
Unaccounted-for Water 1997 (%):	Not available

The majority of Johnson County residents on "city water" are provided service by Paintsville City Utilities. The system draws its raw water from the Levisa Fork of the Big Sandy River. The quantity and quality of this source is subject to question, considering long-term supply needs and the growing regulatory requirements in regard to water quality. The City currently

services 5,101 residential and 428 commercial customers in Johnson County and 225 customers in Lawrence County. The City operates a water treatment plant that has a production capacity of 3.0 million gallons per day. On the average day, the plant produces approximately 1.8 million gallons of potable drinking water that is 60% of its designed capacity. The City's storage system (2,833,000 gallons) consists of eleven (11) water storage tanks located at various points within the City and Johnson County and a clear well located at its treatment facility. The calculated charge for 5,000 gallons of treated water (residential usage) in the city limits is \$20.36. Paintsville City Utilities has a total of 27 employees; five are certified water treatment plant operators, and ten are certified distribution operators. The other employees provide billing and financial oversight.

The need for water service expansion in Johnson County results primarily from the degradation of ground water as a long-term consequence of mining activity and oil and gas drilling. Additionally, residents of neighboring counties including Lawrence and Morgan Counties are requesting that the City extend water service into their areas because there is no other system that can feasibly serve them. The City of Paintsville and the City of Salyersville (Magoffin County) have an interconnection to provide emergency back up, however there is no formal written agreement regarding its usage. Requests for such regional supply are expected to continue for the foreseeable future, especially if an adequate source of raw water can be secured. In order to keep pace with growth demands along existing service mains throughout Johnson County neighboring counties and new, the system must secure an adequate, permanent water source, construct a new treatment plant, and upgrade transmission and distribution system facilities.

Paintsville City Utilities has initiated plans for the development of a raw water intake structure and a new 4 mgd treatment plant to be located on Paintsville Lake, near the dam, to be designed for future upgrading to 10 mgd. This, together with a 4 million-gallon reservoir to serve as both clear well and potable water storage, and transmission mains to the existing system will provide for all long-term water needs through the 20-year planning period. By this action the City would no longer rely on the Levisa Fork for water supply.

Construction expenses for the raw water intake structure are estimated at \$2,300,000; construction of a 4 mgd water treatment plant at estimated to be \$3,900,000; and construction of a 4.0 million gallon potable water storage tank at \$650,000. Total estimated project cost is \$6,850,000

AUXIER WATER COMPANY

The Auxier Water Company is a private water distribution system based in and serving the northernmost area of Floyd County and several communities in Johnson County. The Auxier Water Company is located in Floyd County and is described in detail in the Floyd county section

There is significant growth potential for the system in the Johnson County portion of its service area, principally along KY Route 3.

PRIVATE DOMESTIC SYSTEMS

About 9,800 people in Johnson county rely on private domestic water supplies: 9,500 on wells and 300 on hauled water, cisterns and other sources.

Most drilled wells in valley bottoms are adequate for a domestic supply. Fewer than half of the wells drilled on hillsides are adequate for a domestic supply except in areas south of Paintsville where about three-quarters of the wells on hillsides are adequate for domestic water supply. Some wells on ridges or hilltops are adequate for a domestic water supply. In the southern part of the county in the Van Lear area, drilled wells more than 200 feet deep in valleys yield enough water for small municipal or industrial supplies.

Most of the water from drilled wells is moderately to extremely hard and contains noticeable amounts of iron. In the eastern and southeastern half of the county salty water can be found in bedrock wells less than 100 feet below the level of the principal valley bottoms. A few springs supply sufficient quantities of water for domestic use. Almost all springs yield less than 5 gpm.
